**Transportation
Synthesis Report**

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State DOT Environmental Programs:
Evaluation and Performance Measures

Prepared for
Bureau of Equity and Environmental Services

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Transportation Synthesis Reports (TSRs) are brief summaries of currently available information on topics of interest to WisDOT technical staff. Online and print sources include NCHRP and other TRB programs, AASHTO, the research and practices of other state DOTs, and related academic and industry research. Internet hyperlinks in TSRs are active at the time of publication, but changes on the host server can make them obsolete.

Request for Report

WisDOT's Bureau of Equity and Environmental Services is interested in documenting and evaluating its environmental program and associated procedures, with an emphasis on performance measures. The bureau asked us to gather related information about other state DOT environmental offices.

Summary

In a preliminary scan we located information on operations and performance measurement for the environmental offices of seven state DOTs. Full state-by-state summaries are presented below. Highlights include:

- Arizona- Environmental Planning Group Annual Report for FY 2006. EPG uses a variety of methods to continuously monitor its performance and improve its value to the ADOT organization, including the number of environmental clearances actually issued within a fiscal year. Process improvements include the rollout of Version 1.2 of a centralized project tracking system database.
- California- Standard Environmental Reference. The Caltrans Division of Environmental Analysis manages the Standard Environmental Reference, an online resource to help state and local agency staff plan, prepare, submit and evaluate environmental documents for transportation projects.
- Florida- ETDM Performance Management Plan. FDOT, through its Central Environmental Management Office, is implementing the Efficient Transportation Decision Making (ETDM) process. The ETDM Performance Management Plan illustrates the benefits of collecting, monitoring and reporting on performance measures such as the ability to continuously monitor program area performance, identify problems early and develop efficient and effective solutions and to recognize and promote successes.
- New York- ERTRAK database. NYSDOT has several tools for conducting environmental audits, including the ETRACK database, a Microsoft application linked to NYSDOT's Program Support System, which tracks projects and their major milestones. The goal is to establish a method to assure consistency in statewide environmental information.
- Oregon- ODOT Annual Performance Progress Report for FY 2005-06. This report covers the 28 Key Performance Measures (KPM) used during the year which directly support department goals and the report highlights these connections. Measures that affect Oregonians' livability and the state's environment are highlighted, and discussion includes performance-tracking targets for KPM 17 -- the improvement of fish passage.
- Vermont- Environmental Operations Manual. This manual serves as a guide to the environmental procedures typically required on Vermont Agency of Transportation projects. The manual also serves as a sourcebook that identifies the various environmental laws and regulations that come into play on transportation projects, describes the framework for environmental resource assessment, and explains how resource assessment is integrated into the overall project development process.

- Washington- Gray Notebook. WSDOT's Measures, Markers and Mileposts, also called the Gray Notebook because of its gray cover, provides quarterly, in-depth reports on agency and transportation system performance and is an important internal management and integration tool. The electronic subject index provides access to current and archived performance information, and links to every performance topic published to date, including Environmental Stewardship. WSDOT's Environmental Procedures Manual, and the Performance Measure Library of best state performance measurement practices, are also helpful online resources.

Arizona

ADOT Environmental Planning Group Annual Report FY 2006
http://www.dot.state.az.us/EEG_common/documents/files/reports/epg_annual_report_fy_2006.pdf.
Scroll to Process Improvement (Page 19):
Significant achievements were completed in FY 2006 which continued the progress of understanding, automating and streamlining operations, as well as providing information and facilitating communications to better meet customer needs:

- Project Tracking System. EPG, in partnership with ADOT's Program and Project Management Section, completed the rollout of Version 1.2 of a centralized project tracking system database which maintains information regarding the number of projects, responsible staff, due dates, concerns and the current status of the project for each specialty (air, water, hazardous materials, etc.).
- Categorical Exclusion Checklist. EPG worked with FHWA to develop a streamlined approach to Categorical Exclusion documentation for ADOT projects in the form of an environmental checklist.
- In-Lieu Mitigation. The Corps of Engineers is implementing a new process to improve the way in-lieu mitigation funds are collected and expended.
- Biology. In the arena of process development, a new scoping process is currently being coordinated with the Arizona Game and Fish Department using their new on-line environmental review tool.
- Education and Training. EPG continued to provide education and training within and outside of the department over the past fiscal year.
- EPG Web site. Whenever possible, presentations and handout materials are placed on the EPG Web site to allow continued use of these materials and information.

California

Standard Environmental Reference
http://www.dot.ca.gov/ser/.
The Caltrans Division of Environmental Analysis manages the Standard Environmental Reference, an on-line resource to help state and local agency staff plan, prepare, submit and evaluate environmental documents for transportation projects. The SER contains information appropriate to all transportation projects developed under the auspices of Caltrans, and to all local agency highway or local streets and roads projects with funding or approvals by FHWA. Volume 4 of the Caltrans Environmental Handbook series – Community Impact Assessment – is a 1997 publication that addresses environmental justice and other community issues, and describes the methodological approaches and various sources available for obtaining information on the effects of transportation projects on the community. See the volume at http://www.dot.ca.gov/ser/vol4/envhb4.pdf.

Florida

Efficient Transportation Decision Making (ETDM) Process and Performance Measures.
FDOT's Central Environmental Management Office seized the initiative when Congress passed TEA-21 and decided to reexamine the department's entire process from the very early stages of planning through project development and permitting. Revamping the entire process required that a more efficient methodology be used to present project planning information and to gather input from agencies and the affected community. As part of the new ETDM process, FDOT has implemented an Internet-accessible interactive database tool called the Environmental Screening Tool. The ETDM public access site is located at http://etdmpub.fla-etat.org.

In April 2005, the ETDM Performance Management Plan was published, which contained a series of recommendations for implementing a Performance Management System for the ETDM process. As part of the effort, a Performance Measures Implementation Group composed of representatives from each FDOT district was assembled to help direct and implement performance management for the ETDM process, including the project development phase. The purpose of the work group was to determine performance measures, associated data needs and collection requirements, and other critical mechanisms necessary to evaluate and monitor the ETDM process.

Twenty-three performance measures were identified that will be used to evaluate the effectiveness of the ETDM process. See the plan at http://www.dot.state.fl.us/emo/pubs/Final%20PMP%20Report_April%202005.pdf.

Also see Environmental Streamlining Measures of Effectiveness. Section 1309 of TEA-21 mandated Environmental Streamlining as the timely delivery of transportation projects while protecting and enhancing the environment. FHWA has posted a helpful selection of related documentation including studies and collections of data that identify and explain the amount of time required to complete the NEPA Process, and studies by the Gallup Organization on implementing performance measurement in environmental streamlining, at http://environment.fhwa.dot.gov/strmlng/es10measures.asp.

New York
NYSDOT has several tools for conducting environmental audits, including the ETRACK database. ETRACK is a Microsoft application linked to NYSDOT's Program Support System, which tracks projects and their major milestones. The database details specific aspects of the project, such as environmental, landscape, architecture and social impacts. The goal of the ETRACK effort is to establish a method to assure consistency in statewide environmental information. For more information about this practice and others, see the Domestic Scan Report on Environmental Commitment Implementation: Innovative and Successful Approaches at http://www.environment.fhwa.dot.gov/strmlng/domScanRpt/index.asp.

Oregon
Oregon Department of Transportation Annual Performance Progress Report (APPR) for Fiscal Year 2005-06 http://www.oregon.gov/ODOT/CS/PERFORMANCE/docs/2006_ANNUAL_PERFORMANCE_REPORT.pdf.
Part III, Key Measure Analysis, analyzes agency progress in achieving each performance measure target and any corrective action that will be taken. This section, the bulk of the report, shows performance data in table and chart form.
Scroll to 2005-07 Key Performance Measure (KPM) No. 17 -- Fish Passage at State Culverts: number of high priority ODOT culverts remaining to be retrofitted or replaced to improve fish passage (Page 43):
Different program targets have been used to gauge performance for this KPM. These targets have included: minimum number projects per year and number of miles of stream habitat opened up per year. While these targets have been effective at tracking performance, the targets and actuals were changed for this reporting cycle. The new targets reflect the remaining balance of high priority culverts (i.e. actuals) that need repair from the previous year minus the number of culverts planned for completion during the target year. Program targets are determined based on available annual funding levels. The new actuals represent the total number of statewide high priority culverts owned and managed by ODOT that remain to be replaced or retrofitted.

Also see Manuals, Procedures & Practices at http://www.oregon.gov/ODOT/HWY/GEOENVIRONMENTAL/manual_procedures_practices.shtml for direct links to all ODOT Geo-Environmental Section documents of this nature.

Vermont
Environmental Operations Manual
http://www.aot.state.vt.us/TechServices/Documents/EnvirOpsManual/FullEnviroOpsManual.pdf.
This manual is intended to provide users with a guide to the environmental procedures typically required on Vermont Agency of Transportation projects. In addition, the intent is to provide a sourcebook which 1) identifies the various environmental laws and regulations that come into play on transportation projects, 2) describes the framework for environmental resource assessment, and 3) explains how resource assessment is integrated into the overall project development process. The procedures herein are intended to be consistent with those described in the VTrans Project Development Process Manual and FHWA's Highway Methodology. Other transportation authorities, such as aviation and railroad, may follow different procedures, particularly in NEPA documentation. Contents include:

- A description of the overall VTrans structure and mission, and a detailed description of the Environmental Section. An organization chart shows the structure of the section and the responsibilities of each staff position are described.
- A detailed description of the environmental procedures required during each step of project development, from project selection through construction. A definition of each of the major development stages is provided to help the user understand the overall process.

- The procedures for obtaining resource information required during project development. A definition of each environmental and cultural resource and methodologies for resource identification are provided, with references to rules, manuals and technical guides.
- Descriptions of the permits, approvals or other procedures required for regulatory approval, including summaries of programs; references to statutes, rules, permit applications and other relevant materials; jurisdictional criteria; and descriptions of information required. Sources of additional assistance are referenced.
- Copies of permit applications and important policies and memoranda, which may not be readily available elsewhere, are included in appendices.

Also see the VTrans Environmental Stewardship Ethic Policy Statement at http://www.aot.state.vt.us/TechServices/EnvPermit/environmentalpolicy.htm. Approved by Agency Secretary Patricia McDonald in 2004, this statement establishes the environmental stewardship ethic policy for VTrans and defines the agency's environmental policy, principles and practices.

Washington
WSDOT's Measures, Markers and Mileposts, also called the Gray Notebook because of its gray cover, provides quarterly, in-depth reports on agency and transportation system performance. The purpose of the Gray Notebook is to keep WSDOT accountable to the Transportation Commission, Washington State citizens, legislators and transportation organizations, and it is also an important internal management and integration tool. The electronic subject index (http://www.wsdot.wa.gov/accountability/graybookindex.htm) gives access to current and archived performance information, and links to every performance topic published to date, including Environmental Stewardship (http://www.wsdot.wa.gov/accountability/graybookindex.htm#environment). The practical reports available through the Index include:

- *Environmental Program Annual Update / Improving Environmental Review and Tracking / Evaluating Completed Environmental Assessments*. When a project's expected environmental impacts are not large enough to require preparation of a full environmental impact statement, WSDOT often satisfies NEPA requirements by preparing environmental assessments (EAs). WSDOT recently evaluated processing times for EAs from 1998 to 2002. Based upon 14 completed assessments, the total processing time dropped 134 percent, from 1,846 days in the 1998 experience to 788 days in the 2001-2002 cluster of projects. The biggest improvement came in the final step of completing an EA, the issuance of a Finding of No Significant Impact. The processing time for this step was reduced from 261 days in 1998 to 75 days in 2001-2002. The improved processing time is a result of WSDOT staff preparing documents that were successful in avoiding iterative redrafting with FHWA. (Gray Notebook June 30, 2005, Page 53, http://www.wsdot.wa.gov/accountability/Archives/GrayNotebookJun-05.pdf#page=56)
- *Environmental Programs Annual Update / Environmental Management Systems (EMS) Update*. Excerpts:
  - WSDOT continues to develop its Environmental Management System (EMS) to help support the department's environmental efforts and integrate those efforts into everyday operations. Reporting, which is the culmination of all EMS activities, facilitates self-evaluation of performance and allows future improvements.
  - Release 1 of the Commitment Tracking System (CTS) is now online. CTS is intended to track environmental commitments from their inception, through project development and construction to the commitment's completion or pass-off to Maintenance. The system will report on commitments by project or region.
  - WSDOT is celebrating its first year of statewide implementation of the Construction Compliance Program, which is built around core EMS elements and includes written procedures, training, constructability reviews, tracking, fulfillment of commitments and measuring performance. Regional offices have developed compliance plans around these elements and have dedicated in-field staff to support construction offices. (Gray Notebook Dec. 31, 2005, Page 56, http://www.wsdot.wa.gov/accountability/Archives/GrayNotebookDec-05.pdf)

Also see:
-- Environmental Procedures Manual at http://www.wsdot.wa.gov/fasc/EngineeringPublications/Manuals/EPM/EPM.htm. The EPM provides guidance for complying with federal, state and local environmental laws and regulations and WSDOT policy during all phases of the WSDOT transportation decision-making process. A general statement of WSDOT environmental policy is provided at http://www.wsdot.wa.gov/environment/EnvPolicyStatement.htm.
-- Performance Measures Library at http://www.wsdot.wa.gov/accountability/library/#resources. WSDOT recently completed a best practices inventory of performance measurement practices in other state departments of transportation. This library is a resource for researching these practices, and includes links to national and international efforts and other notable performance reporting by city, county and regional entities.